

## CASE STATEMENT

### **Protection of Upstate Water Resources, Public Water Supplies, Public Health, and the Environment: The Lake Conestee Dam Project**

***STATEMENT OF NEED*** – *The Lake Conestee Dam (LCD), located on the Reedy River, south of Greenville, and now 129 years old, poses a very serious looming environmental threat to the Upstate. This historic structure, owned by the Conestee Foundation (CF), holds back millions of tons of contaminated sediment filling the old lake. Downriver, Lake Greenwood provides the potable water supply for Greenwood and Laurens Counties.*

- Lake Conestee (LC) was created by a dam built in 1892 to provide power and water to Reedy River Factory (Conestee Mill). The resulting 140-acre millpond is now nearly filled with roughly 3.1 million tons of contaminated sediments.
- LC has been the receptor for contaminants from hundreds of industrial sources going back to the 1890s, from throughout the 65-square mile Reedy River watershed upstream, which includes nearly all of old industrial Greenville.
- Site assessment work completed from 2000-2012 confirmed LC sediments are significantly and extensively contaminated. As a result the sediments should not be disturbed, and should be kept in check behind the dam.
- Because of risks posed by the contaminated sediments the dam is classified as a **Significant Hazard** structure. **The Lake Conestee Dam is absolutely not a dam that can be removed or allowed to fail.**
- A strong, secure, and durable Lake Conestee Dam, in excellent condition, and well-maintained, is critical to protecting downstream water supplies as well as downstream natural resources and private properties.

***WHAT HAS BEEN DONE?*** – *Acquisition of the Lake Conestee site and dam, contamination assessment, risk assessments, institutional controls, temporary dam repairs, dam assessment, development of Lake Conestee Nature Preserve (LCNP), and long-term planning for emergency action and for dam rehabilitation / replacement.*

- Conestee Foundation (CF), a non-responsible party, with support from SCDNR and SCDHEC, acquired LC and the LCD in 2000.
- The sediments of LC contain millions of pounds of potentially toxic, persistent, hazardous substances, including metals, polycyclic aromatic hydrocarbons, pesticides, and PCBs. If not contained by the dam, these contaminated sediments will flow downstream, posing a serious threat to water supplies, natural resources, and private property assets along the Reedy River, in lower Greenville and Laurens Counties, all the way to Lake Greenwood.
- Under SCDHEC oversight CF has demonstrated that contaminants in LC sediments do not present a health threat to persons engaged in non-contact recreation at LCNP. The sediment-filled lake is managed to minimize human contact with contaminants, and minimize risks to park patrons and wildlife.

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- Independently, SCDHEC (in 2004) and USEPA Region IV (in 2019) have confirmed the LC site is a “National Priority List-Caliber Site,” potentially eligible for the Federal Superfund list. Both agencies have confirmed the site is large, complex, and a significant and serious threat, and that it will require perpetual care.
- Since 2000, the CF has performed critical repairs to the dam, and has completed four engineering studies on the dam. Each study has shown the dam to be **grossly inadequate compared to current engineering standards**.
- These studies all confirmed **the LCD urgently needs to be rehabilitated, due to its age, design, deterioration of its stone masonry, accumulation of contaminated sediments upstream, and continuing release of hazardous substances**.
- Neither remediation nor removal of the sediments, nor removal of the dam are viable options for addressing the massive amount of contamination at the site.
- Over the past 20 years, numerous inspections of the LCD, by independent private engineering consultants, and by SCDHEC, NRCS, and U.S. Army Corps of Engineers, have all confirmed **many significant and serious defects and deficiencies of the LCD attributable to its age, and “POOR” condition**.
- The assessments and inspections of the dam also underscore the vulnerability of the dam to compromise by extreme flooding events from a highly urbanized upstream watershed, seismic activity, and/or acts of sabotage.
- If the dam fails, the Lake Conestee site and the downstream Reedy River would likely be re-classified as a Federal Superfund site. Uncontrolled loss of the dam would have devastating economic impacts to the surrounding and downstream communities.
- Failure of the LCD could also result in damage to or closure of the Conestee Road bridge (ca. 1958), located 700 feet downstream. This is a high-traffic volume state road essential to local commerce.
- Now, after over 20 years of close partnership with SCDHEC, USEPA, and other agencies, the CF has thoroughly assessed the Lake Conestee Site, and the condition of the dam, and has defined a solution for long-term care.

### ***PRIORITY ACTIONS – Dam Rehabilitation or Replacement to Assure Long-Term Care.***

- In 2018-2019, with support from SCDHEC, CF engaged an expert dam engineering firm to perform a rigorous, independent, and objective review of all viable options for the LC and LCD situation by conducting a “Final Pre-Design Study for the Rehabilitation and/or Replacement of the LCD.” This study has been completed and has identified the **final Recommended Alternative for the LCD, one that meets all design criteria and that, if constructed, will protect Lake Conestee and the Reedy River over the next 100 years**.
- **We are now at a critical point where we must rehabilitate the Lake Conestee Dam. Timely action to mitigate this known threat will require the support and leadership of responsible parties, stakeholders, and state and federal agencies.**
- **Until the Recommended Solution is implemented the LCD continues to decay further every day. Without rehabilitation, the dam’s eventual failure is only a matter of time.**
- CF, in collaboration with SCDHEC, is diligently exploring a range of funding pathways with critical stakeholders. The parties are likewise exploring alternative ownership and long-term stewardship of the regulated site (LC) and the regulated dam (LCD).

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